AMPHIBIOUS WARFARE TRAINING

Major Steele

United States Marine Corps

Chief Warrant Officer 4 Stegman

United States Navy

AGENDA

- Amphibious Doctrine
- Organization of the Amphibious Task Force (Navy)
- Amphibious Ships
- Organization of the Landing Force (Marine Corps)
- Planning - The Marine Corps Planning Process
- Planning – Operations Order Format and Content
- Planning - The Amphibious Planning Process
- Embarkation
- Rehearsal
- Movement
- Action – Advance Force Operations
- Action – Beach and Surf Planning
- Action – Surface Ship-to-Shore Movement
- Action – Logistics Ashore
- Action – The Landing Plan
- United States Navy / Marine Corps Training Plan

AMPHIBIOUS DOCTRINE, HISTORY

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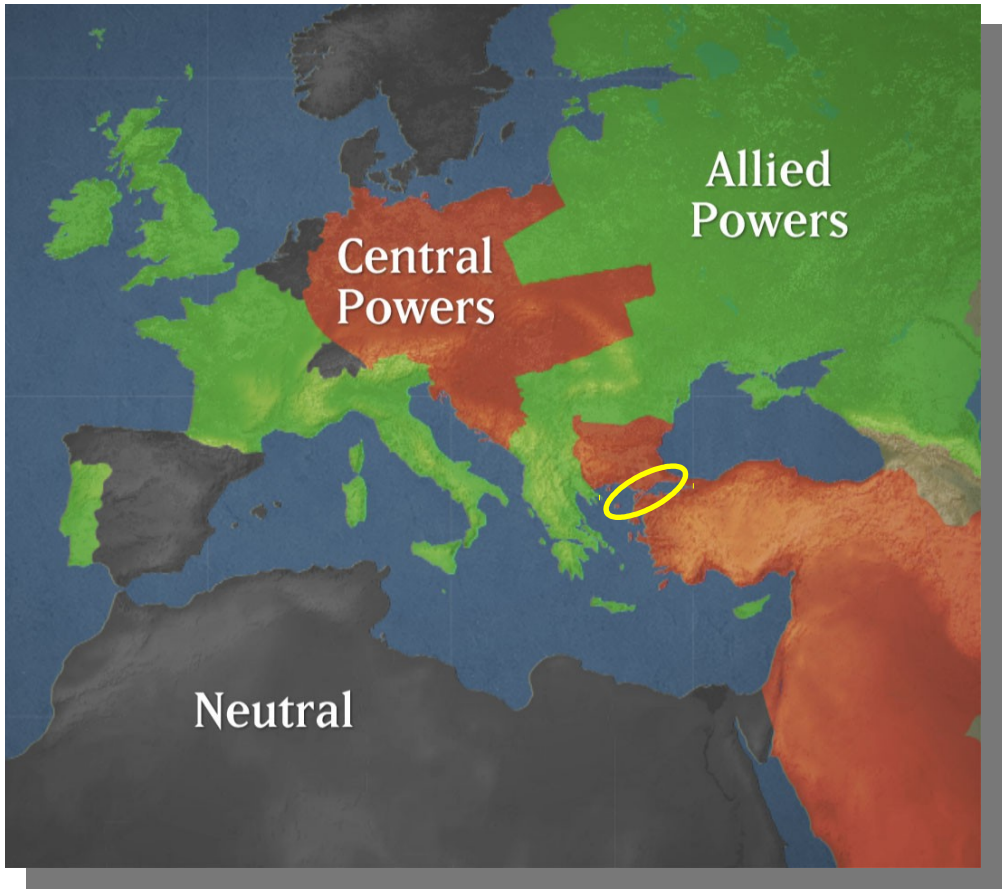
United States Marine Corps

AMPHIBIOUS HISTORY

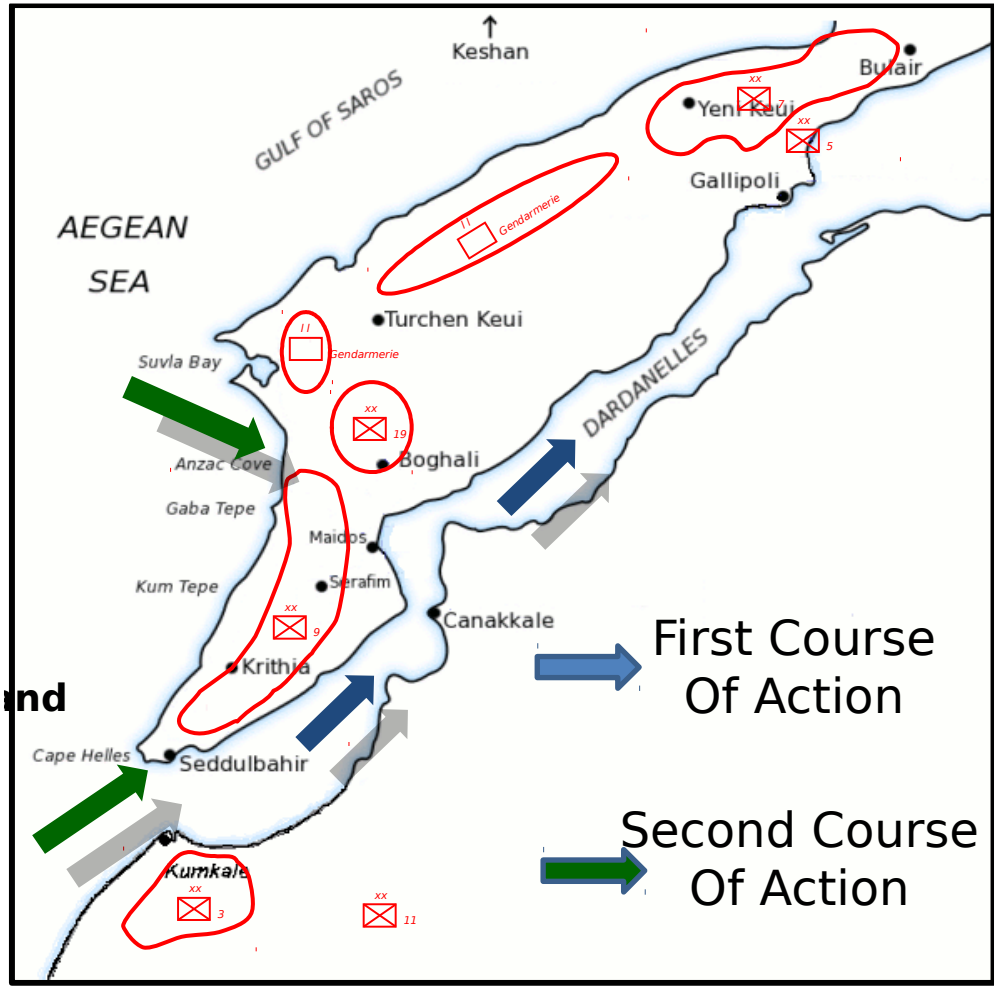
- 1915…
- Russia was isolated from its allies
  - Baltic Sea locked by German Navy
  - Entrance to Black Sea controlled by Ottoman Empire
- Western Front, in France and Belgium fixed
- Eastern Front essentially the same
- Political / Military advantages of new front



CAMPAIGN OVERVIEW

Central Powers

- **Turkish 5th Army**
  - **6 Divisions**
  - **84,000 Men**
- **Land Mines**
- **Anti-Ship Mines**
- **Sub-Surface Obstacles**
- **Trenches**
- **Short-Range Artillery**
- **Internal Lines of Communication and Resupply**

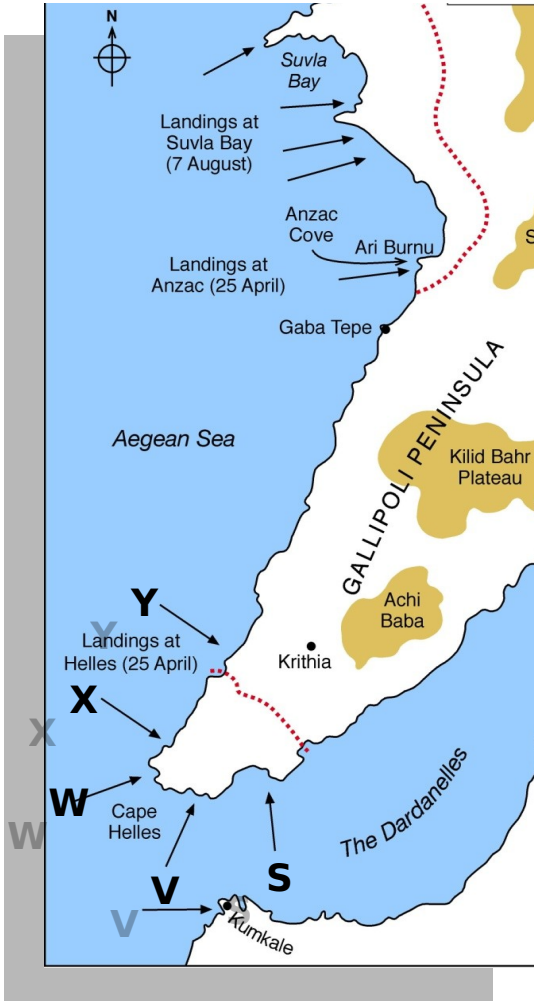


The Allies

- **First Course of Action:**
  - **Navy Only**
  - **16 Ships**
  - **Mission Failure**
- **Second Course of Action:**
  - **Landing Force Employed**

LESSONS LEARNED

- **V-Beach: Pre-Landing**
  - *Turks*: Prepared to Oppose Landing with (1) Company
  - *British*: Specialized Ship Employed / Fire Support Employed
- **V-Beach: H-Hour**
  - Ship runs aground further from shore than expected
  - Floating bridges used to move soldiers ashore
    - Bridges drifted twice during the landing
  - Fire support stopped once landing started
- **Endstate:**
  - 70% of the initial wave of soldiers was killed or wounded.
  - Remaining soldiers land at night and receive no enemy fire.
  - Objective Secured
- **Other Lessons Learned**



Lessons Learned: Hydrographic and Beach Data Essential / Continuous Fire Support

Amphibious Doctrine, Concepts

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United States Marine Corps

AMPHIBIOUS FORCE

Commander, Amphibious Task Force

Commander, Landing Force

Definition: An Amphibious Task Force and a Landing Force together with other forces that are trained, organized, and equipped for Amphibious Operations.

Navy Force

Landing Force

AMPHIBIOUS TASK FORCE

Commander
Amphibious Task Force

Surface
Amphibious Ships

Aviation

Search and
Rescue

Definition: The Navy officer designated in the Initiating Directive as the commander of the Amphibious Task Force

Commander Landing Force

Command Element

Ground Combat Element

Air Combat Element

Logistics Combat Element

Definition: The officer designated in the Initiating Directive as the commander of the landing force for an Amphibious Operation.

- **Definition**: A military operation launched from the sea by an amphibious force, embarked in ships or craft with the primary purpose of introducing a landing force ashore to accomplish the assigned mission.

- **Purpose of Amphibious Operations**
- **Types of Amphibious Operations**
- **Keys to Successful Amphibious Operations**
- **Limitations**
- **Relative Strength Requirements**
- **Supporting, Advance Force, and Preassault Operations**

PHASES OF
AMPHIBIOUS OPERATIONS

- **Planning**
  - The period extending from issuance of the order to embarkation.
- **Embarkation**
  - The embarkation phase is the period during which the forces, with their equipment and supplies, embark in assigned shipping.
- **Rehearsal**
  - The rehearsal phase is the period during which the perspective operation is rehearsed
- **Movement**
  - The movement phase is the period during which various elements of the Amphibious Force move from points of embarkation to the Amphibious Objective Area
- **Action**
  - The decisive action phase

ORGANIZATION OF THE AMPHIBIOUS TASK FORCE (NAVY)

Chief Warrant Officer
Stegman

United States Navy

MPHIBIOUS READINESS GROUP

Ships Assigned

Landing, Helicopter Dock (LHD) / Landing, Helicopter Assault (LHA)
Landing Platform, Dock (LPD) / Landing Ship,

Deployed with Marine Expeditionary Units to provide continuous forward presence

AMPHIBIOUS TASK FORCE, PLATFORMS (NAVY)

Chief Warrant Officer
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United States Navy

LANDING SHIP, COMMAND AND CONTROL

MISSION: Command ship for a joint task force, commander amphibious task force (CATF), or commander

Landing, Helicopter Assault (LHA)

General Purpose Assault Ship

Mission: Embark, deploy, and land elements of a Marine landing force in an amphibious assault by helicopters, landing craft, amphibious vehicles or by a combination of these methods.

Landing, Helicopter Dock (LHD)

Multipurpose Assault Ship

Mission: The same as LHA with significant improvements in airplane support capabilities, a redesigned well deck that can accommodate three hovercrafts, expanded medical facilities, and upgraded Command and Control capabilities.

Landing Platform, Dock (LPD)

LPD 17 – Amphibious Transport Dock

Mission: Transport troops and equipment for amphib ops and land them in the assault area by means of helos or landing craft or AAVs carried in the well deck

Landing Ship, Dock (LSD)

LSD 41 – Dock Landing Ship

Mission: Transport and launch loaded amphibious craft and vehicles with their crews and embarked personnel. It can render limited docking repair service to small ships and craft.

SUPPORT CRAFT

RHIB

Rigid Hull Inflatable Boat

LARC

Lighter Amphibious Resupply Craft

CU – Landing Craft Utility

MISSION: Transport *heavy equipment* and supplies from ship to shore

LCAC – Landing Craft Air Cushion

Mission: Transport weapons systems, equipment, cargo and personnel of the assault elements of the Marine Air/Ground Task Force both from ship to shore and across the beach. The landing craft air cushion (LCAC) is a high-speed, over-the-beach fully amphibious landing craft capable of carrying a 60-75 ton payload

mphibious Assault Vehicle - AAV

Mission: AAV is used by the assault amphibian (AA) battalion to accomplish its mission to land the surface assault elements of the landing force (LF) and their equipment in a single lift from assault shipping during amphibious operations to inland objectives.

MARINE AIR GROUND TASK FORCE ORGANIZATION

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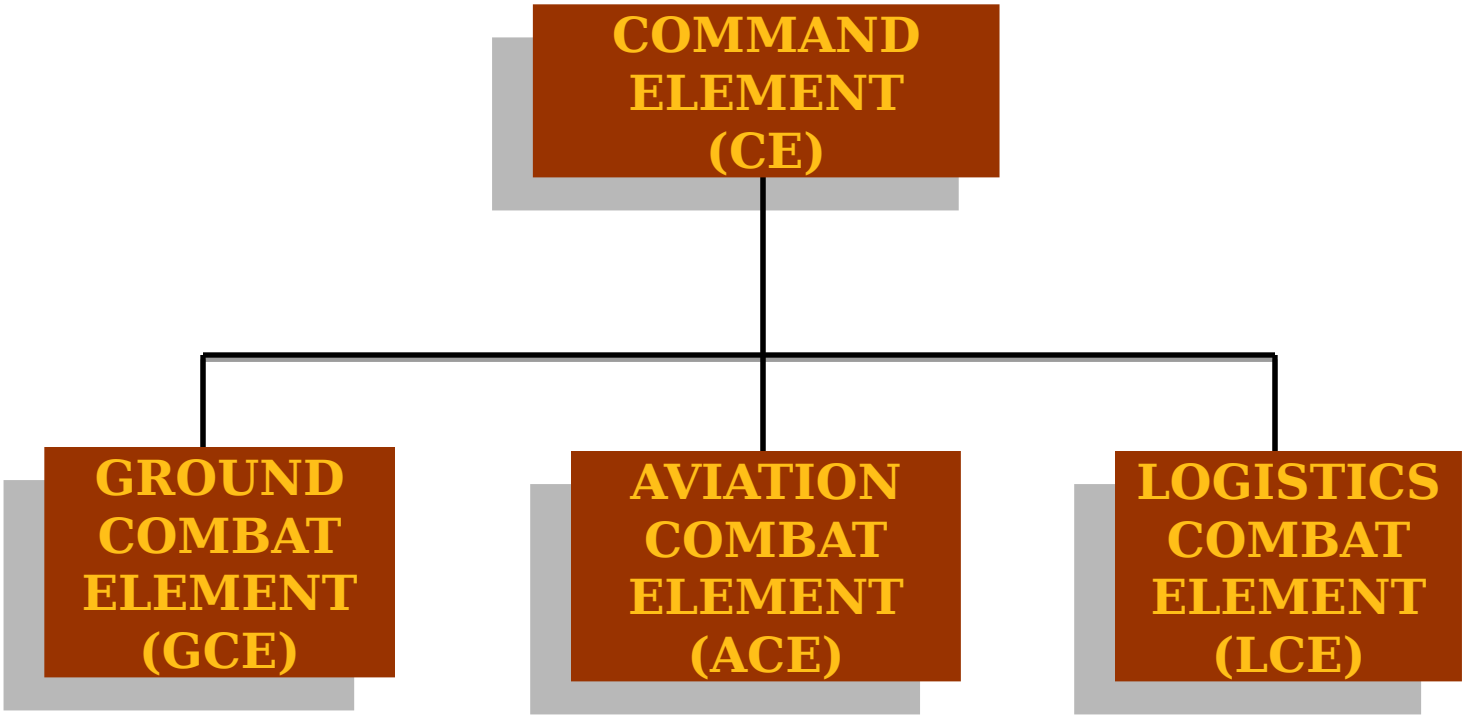
United States Marine Corps

MARINE AIR GROUND TASK FORCE

MARINE AIR GROUND TASK FORCES ARE BALANCED, COMBINED-ARMS FORCES WITH ORGANIC COMMAND, GROUND, AVIATION AND SUSTAINMENT ELEMENTS

COMPOSITION

ALL MARINE AIR GROUND TASK FORCES ARE COMPOSED OF…



TYPES OF ARINE AIR GROUND TASK FORCES

- MARINE EXPEDITIONARY FORCE (MEF)
  - ~50,000 MARINES
  - ~3,000 SAILORS
- MARINE EXPEDITIONARY BRIGADE (MEB)
  - ~18,000 MARINES
  - ~1,000 SAILORS
- MARINE EXPEDITIONARY UNIT (MEU)
  - ~2,OOO MARINES
  - ~100 SAILORS
- SPECIAL PURPOSE MARINE AIR GROUND TASK FORCE (SPMAGTF)
  - MISSION DEPENDENT

EMPLOYMENT

Prevent **Crisis Response** **Contingency Operation** **Major Combat**

Marine Expeditionary Unit

Marine Expeditionary Brigade

Marine Expeditionary Force

Special Purpose Marine Air Ground Task Force

MARINE EXPEDITIONARY UNIT ORGANIZATION

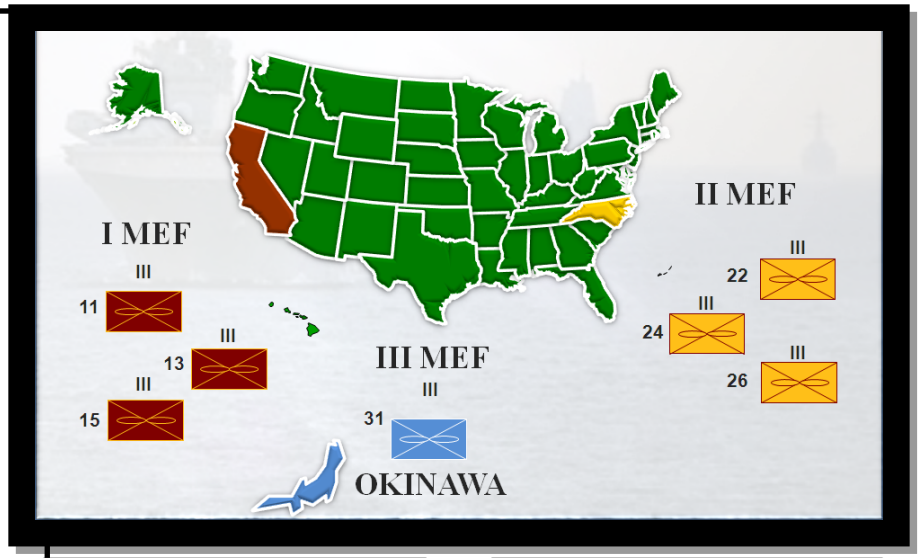
Subordinate Units

Battalion Landing Team

Composite Squadron

Combat Logistics Battalion

Missions….



MARINE CORPS WARFIGHTING DOCTRINE

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United States Marine Corps

/ARFIGHTING DOCTRINE

- War Defined: “A violent struggle between two hostile, independent wills, each trying to impose itself on the other…”
- This will cause:
  - Friction
  - Uncertainty
  - A Rapidly Changing Environment
  - Disorder
  - Significant Impact on the Soldiers and Sailors involved in the conflict (Human Factors)

TWO METHODS TO ACHIEVE VICTORY IN THIS ENVIRONMENT

- **Attrition Warfare**
  - Victory through cumulative destruction of the enemy assets, usually through superior firepower.
  - Prefers a statistical advantage over the enemy
- **Maneuver Warfare**
  - Maneuver warfare is a warfighting philosophy that seeks to shatter the enemy's cohesion through a variety of rapid, focused, and unexpected actions
  - Create a turbulent and rapidly deteriorating situation with which the enemy cannot cope.

YS TO SUCCESSFUL EXECUTION OF MANEUVER WARFARE

- Focus on the Enemy
- Identify Enemy Strengths (Center of Gravity) and Weaknesses (Critical Vulnerability)
- Seek to avoid the enemy strength and attack the critical weakness
- Give the unit assigned to accomplish the overall mission the support required (Main Effort)
- Issue your commanders orders that allow them flexibility on the battlefield (Commander's Intent)
- Use "Combined Arms" to maximum benefit

THE MARINE CORPS PLANNING PROCESS

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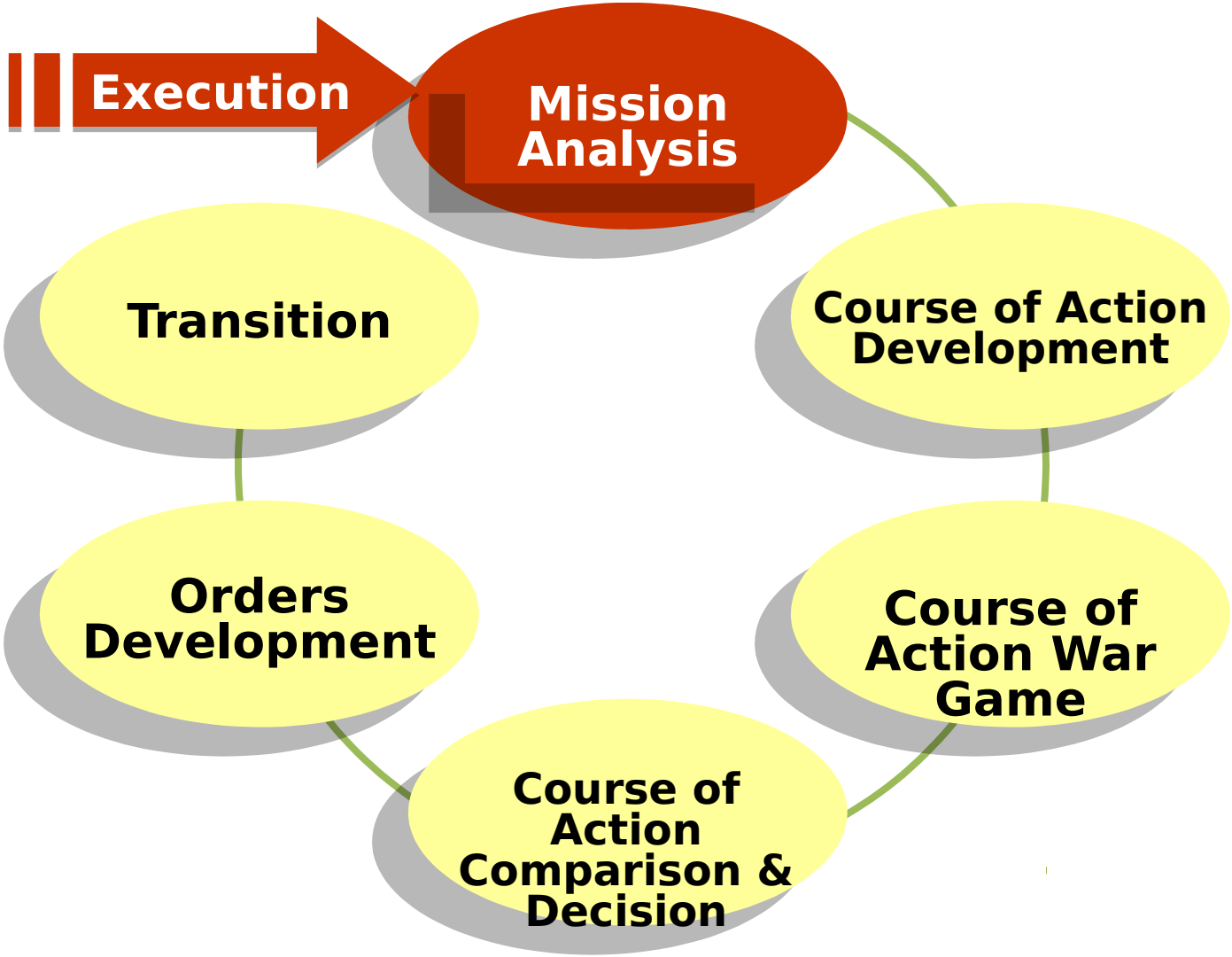
PLANNING IN SUPPORT OF MANEUVER WARFARE

- The planning process used in a maneuver warfare environment must…
  - Focus on the threat
  - enable both deliberate and recognitional decision-making
  - Call attention to the need for staff understanding of the “Single Battle Concept”, “Top-Down Planning”, and “Integrated Planning”
  - Facilitate shared situational awareness
  - Shape planners thinking with regard to events to occur during the engagement and the outcome
  - Facilitate the exercise of initiative

FOUNDATION OF THE MARINE CORPS PLANNING PROCESS

- Top-Down Planning
  - Commander-driven process
- The Single Battle
  - The whole is greater than the sum of its parts
  - Action anywhere is related to action everywhere
- Integrated Planning
  - Coordinating between Higher / Adjacent / Supporting across Warfighting Functions

MISSION ANALYSIS



MISSION ANALYSIS

nput:
Higher Headquarters
- **Orders**
- **Intel products**

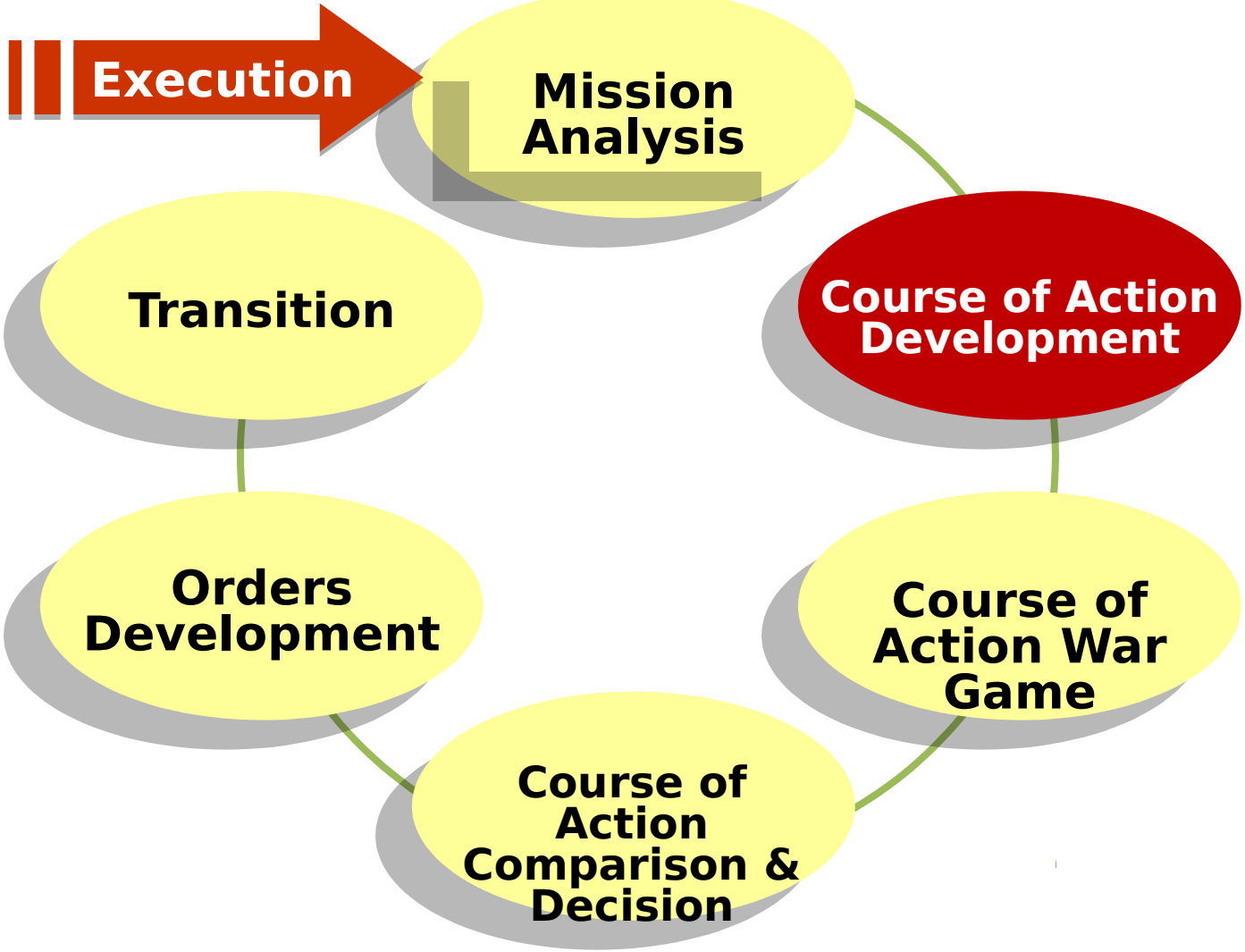
Commander's Orientatio
- **Battlefield Evaluation**
  - **Battlefield**
  - **Intent**
  - **COG**
  - **CCIR**
- **Initial Guidance**

Process

Identify Tasks
Assumptions
Constraints / Restraints
Draft Mission Statement
Draft Warning Order
Information Requirements

•**Output**:
- **Mission statement**
- **Commander's Intent**
- **Cmdr's Planning Guidance**
- Warning Order
- Updated Planning Products
- Staff Estimates

OURSE OF ACTION DEVELOPMENT



OURSE OF ACTION DEVELOPMENT

Input:

- **Mission Statement**
- **Cmdr's Intent**
- **Cmdr's Planning Guidance**
- Updated Planning Products
- Staff Estimates

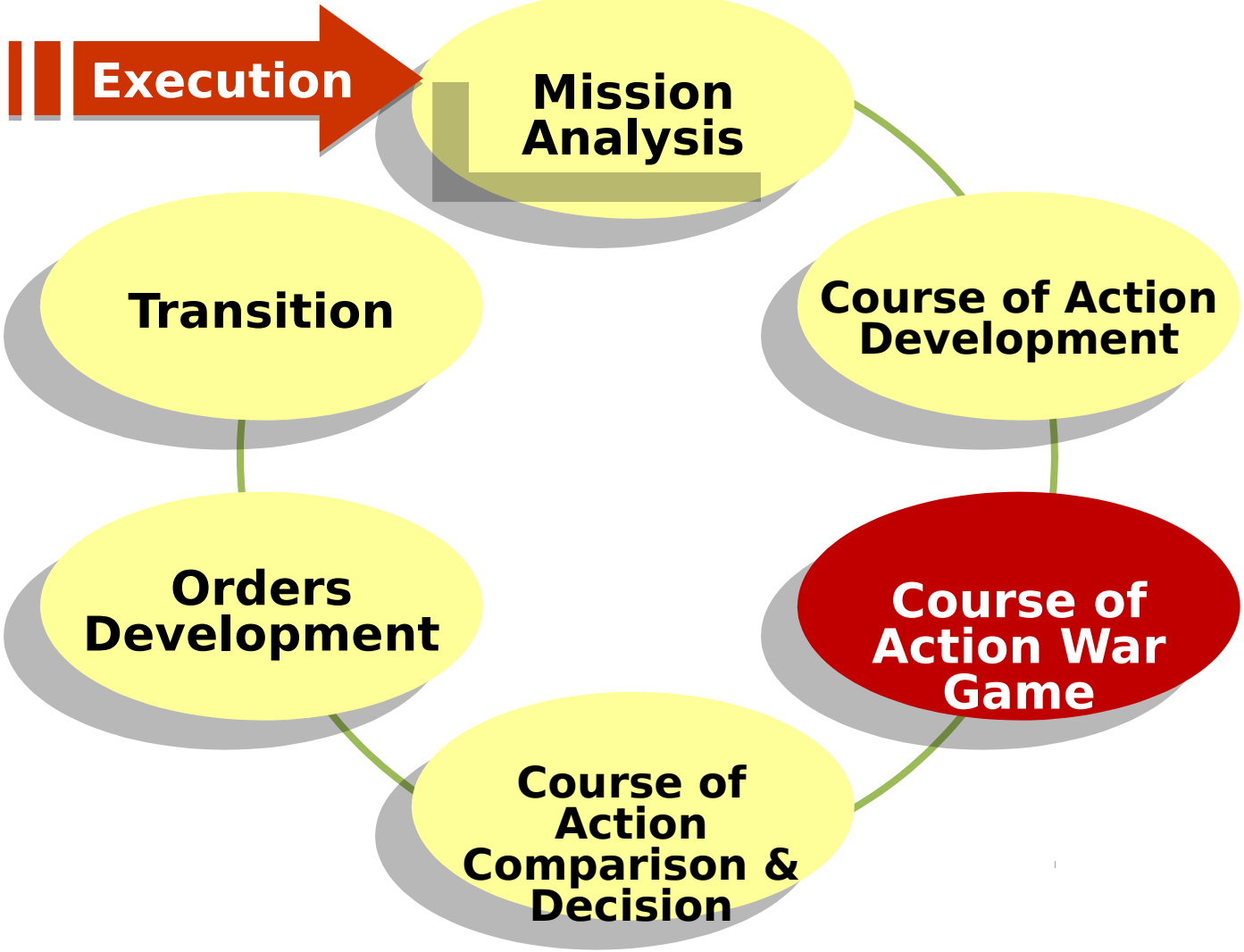
Process

Analyze Relative Combat Power
Develop Initial COAs
Commander's Input
COA Refinement
COA Criteria (Staff)

Output:

- **Designated COAs for War Game**
- **War Game Guidance**
- **Evaluation Criteria**
- Estimates of Supportability
- Planning Support Tools

COURSE OF ACTION WAR GAME



COURSE OF ACTION WAR GAME

Input:

- **Designated COAs for War Game**
- **War Game Guidance**
- **Evaluation Criteria**
- Estimates of Supportability
- Planning Support Tools

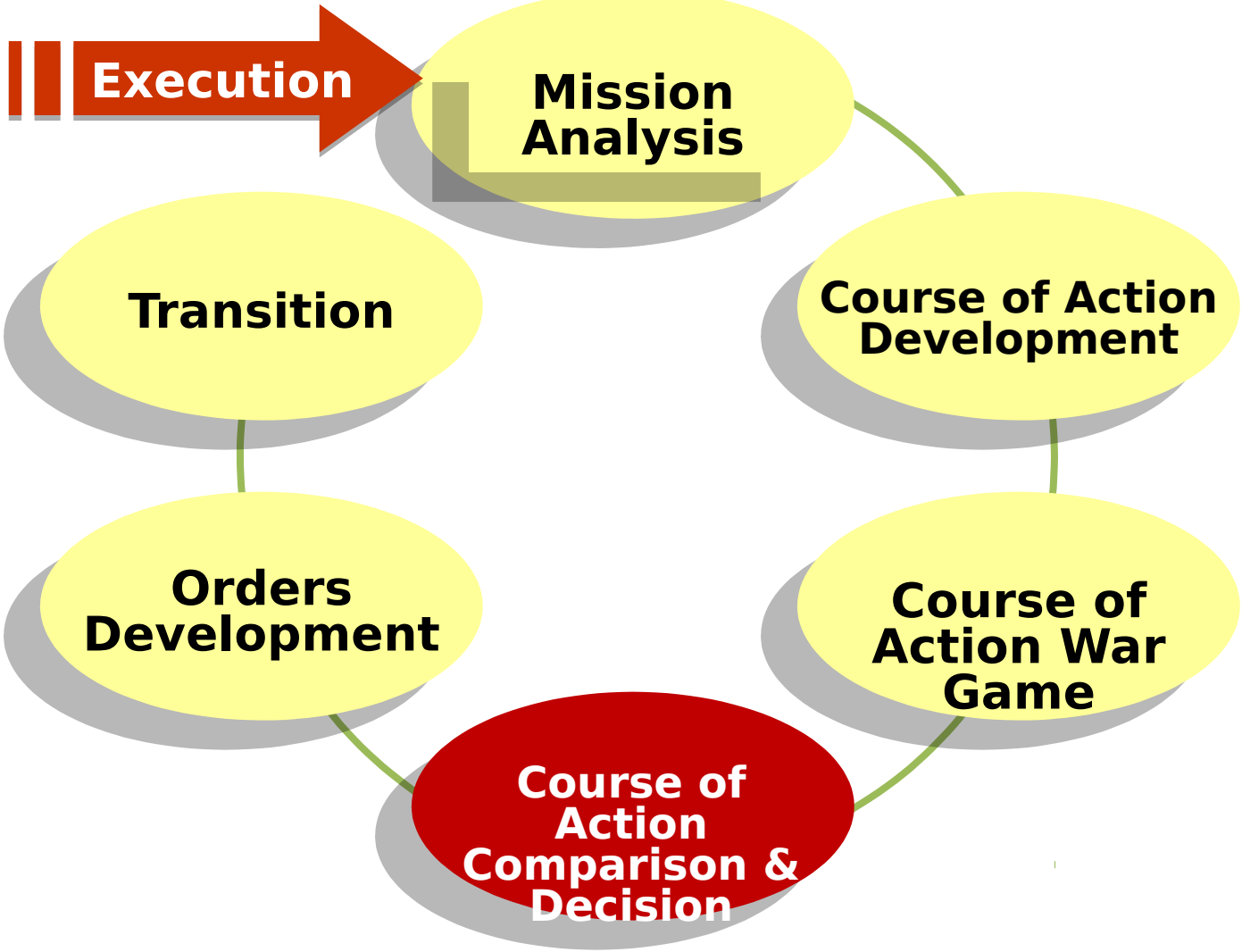
Process

Organize for Wargame
List all Friendly Forces
Select Method
Conduct COA War Game
Record Results
Refine Estimates
Prepare COA War Game Brief
Refine IPB products
Red Cell

Output:

- **War Gamed COA's Graphic & Narrative**
- **Information on Cmdr's Evaluation Criteria**
- Branches and sequels

COURSE OF ACTION COMPARISON AND DECISION



COURSE OF ACTION COMPARISON AND DECISION

Input:

- **War Gamed COAs Graphic & Narrative**
- **Information on Cmdr's Evaluation Criteria**

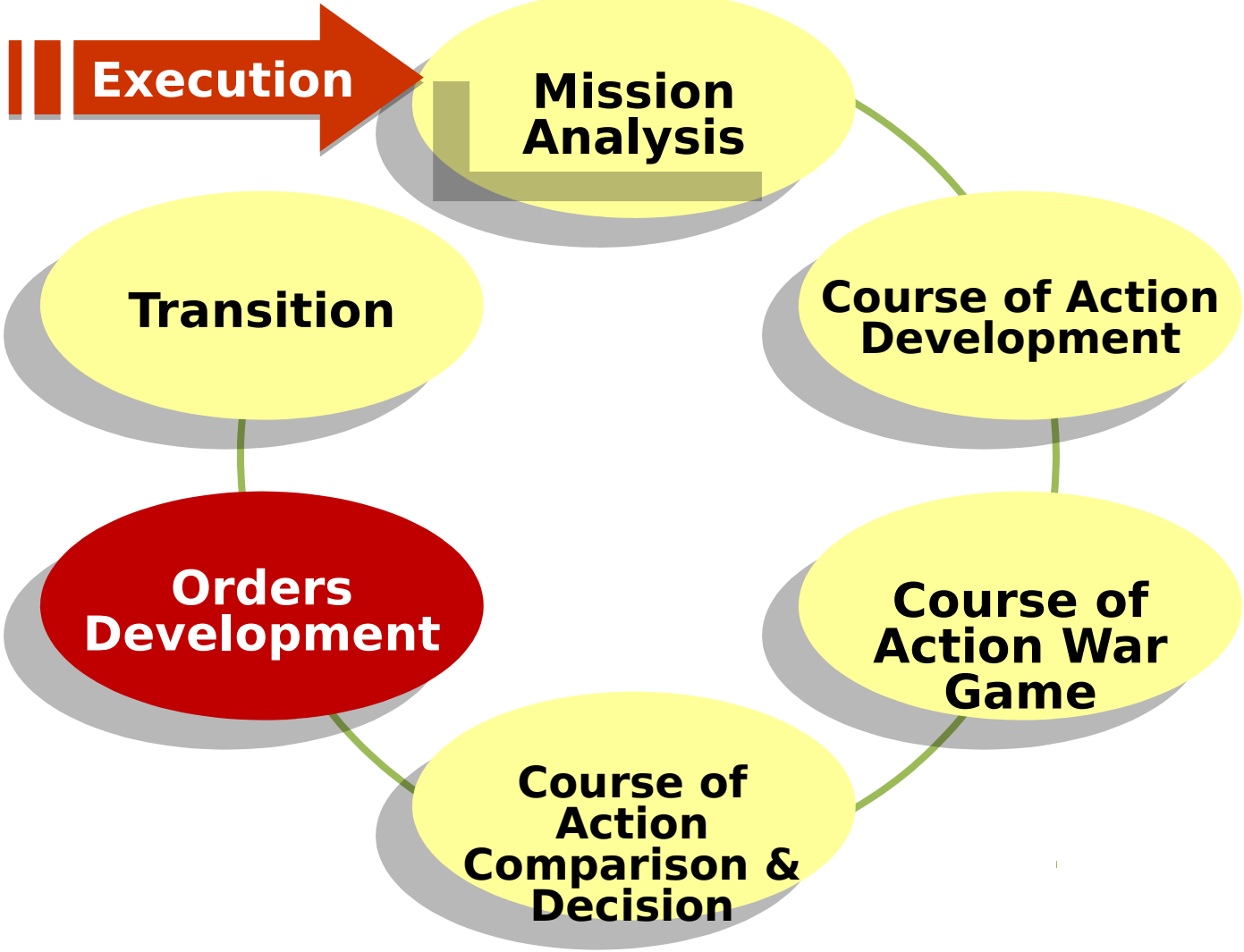
Process

Perform COA Evaluation
Perform COA Comparison
Commander's Decision
Prepare CONOPs
Refine IPB Products

Output:

- **CONOPs**
- Warning Order
- Updated IPB Products
- Staff Estimates
- Branches

ORDERS DEVELOPMENT



ORDERS DEVELOPMENT

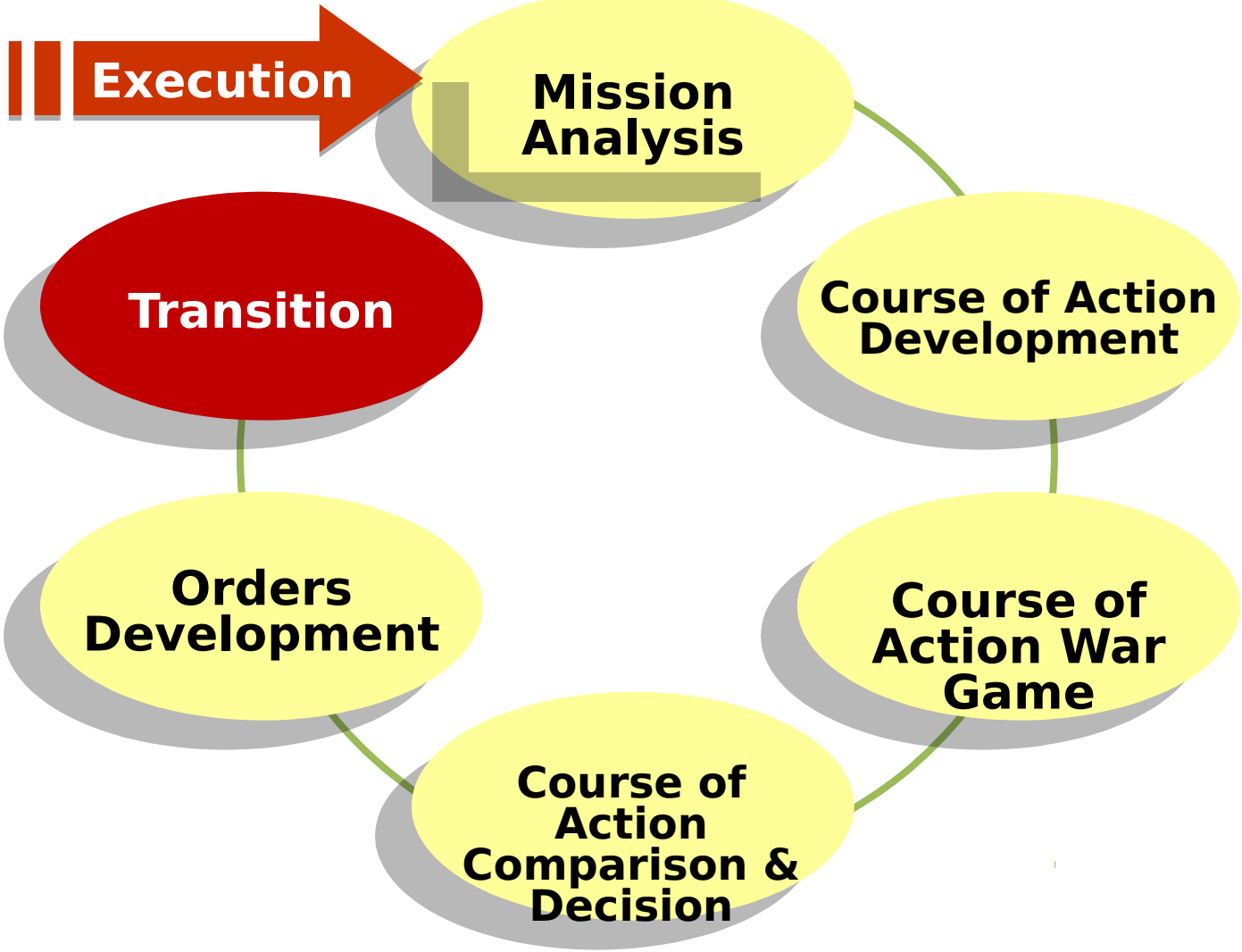
Input:
- **Mission Statement**
- **Refined Commander's Inter**
- **Task Organization**
- **Concept of Operati**
- **Tasks**
- Staff Estimates

Process

Prepare Operations Order
Orders reconciliation
Orders crosswalk
Commander's approval

Output:
- **Operations Order**
- **Fragmentary Order**

TRANSITION


Execution
Mission Analysis
Course of Action Development
Course of Action War Game
Course of Action Comparison & Decision
Orders Development
Transition

TRANSITION

Input:

- **Operations Order**
- **Fragmentary Order**
- Refined IPB Products
- Planning Spt Tools
- Outline Fragmentary Orders for branches

Process

Transition Brief
Drills
Confirmation Brief

Output:

Subordinate Cmdrs and staff that are prepared to:

- Execute the order and possible branches
- Plan for sequels

OPERATIONS ORDERS

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United States Marine Corps

OPERATIONS ORDER FORMAT

(1) Situation

a. General: Overview of the current situation. What brought us to this point.

b. Battlespace: Analyse all aspects of the environment that we will fight in

c. Enemy Forces: The Intelligence Officer goes beyond “known” enemy forces. He determines “most likely” and “most dangerous” enemy courses of action.

d. Friendly Forces: The Operations Officer covers current locations and missions of his unit, as well as adjacent units

e. Attachments and Detachments: Has Higher Headquarters given us any Soldiers for this operation? Have any been taken away?

OPERATIONS ORDER FORMAT

(2) Mission

- The mission statement should answer the following questions: Who, What, When, Where, and Why…
- Example:
  - At 1400, 22 August 2010, 1st Battalion destroys the coastal artillery battery located at GS 124365, in order to prevent that battery from interfering with the landing operations of 2nd Battalion.
- A good mission statement is key to successful execution of maneuver warfare….

OPERATIONS ORDER FORMAT

(3) Execution

★ a. Commander’s Intent:

- Purpose, Method, Endstate

b. Concept of Operations

c. Tasks

- Task for each subordinate unit

d. Identify the Reserve

e. Commander’s Critical Information Requirments

f. Coordinating Instructions:

- These instructions apply to two or more of your subordinate units.

OPERATIONS ORDER FORMAT

(4) Administration and Logistics

(5) Command and Signal

a. Command Relationships

b. Command Posts and Headquarters

c. Succession of Command

d. Signal Plan: What radio frequencies will you be using. Who will be monitoring those frequencies

PLANNING IN AN AMPHIBIOUS ENVIRONMENT

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United States Marine Corps

THE 10 PRIMARY DECISIONS OF AMPHIBIOUS OPERATIONS

PRIMARY DECISION	May be contained in the Higher Headquarters Order	DECISION	Not later than step
Determine AF Mission	X	Mutual	1
Select AF Objective(s)	X	Mutual	1
Determine COA for development	X	Mutual	2
Select COA		Mutual	4
Select Landing Areas		Mutual	4
Select Landing Beaches		Mutual	4
Determine Sea Echelon Plan		NAVY	4
Select Landing Force Objective(s)		Marine / Army	4
Select Landing Zones and Drop Zones		Marine / Army	4
Select Date and Hour of Landing	X	Mutual	4

Iwo Jima

EMBARKATION

Chief Warrant Officer
Stegman

United States Navy

EMBARKATION CONCEPTS

- Assault Echelons (AE) and Assault Follow-on Echelons (AFOE) will be embarked in accordance with the embarkation plan
- Three fundamentals of embarkation plans:
  - Mutual Effort – early and continuous communication is ESSENTIAL
  - Degree of Flexibility – plan for embarkation must support the plan for Ship to Shore movement and ground operations (which are always changing)
  - Rapid and Effective – the rapid build-up of combat power ashore is crucial

EMBARKATION CONCEPTS

- **The organization for embarkation consists of temporary *task organizations* for the Landing Forces and a temporary *organization* of Navy forces.**

- **Navy Responsibilities…**

- **Landing Force Responsibilities….**

EMBARKATION CONCEPTS

- **Embarkation Officer Responsibilities…**

- **Combat Cargo Officer Responsibilities…**
  - **Staff Combat Cargo Officer**
  - **Ship Combat Cargo Officer**

EMBARKATION CONCEPTS

- Keys to successful embarkation planning:
  - Determination of shipping
  - Embarkation schedules
  - Detailed load plans for each ship
    - Support the tactical plan
    - Provide for unit self sufficiency
    - Provide for dispersion of Personnel and Supplies

REHEARSAL

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United States Marine Corps

REHEARSAL DEFINED

- **<u>REHEARSAL</u>**- The phase of an amphibious operation in which one or more exercises are conducted by elements of the Amphibious Force (AF) under conditions approximating those to be encounterec ation.

REHEARSAL CONCEPTS

Must Consider…

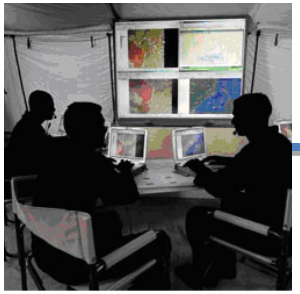
- NUMBER of rehearsals
- NATURE of rehearsals
- SCOPE of rehearsals
- DATE and TIME of each one
- Selection of the rehearsal AREA

Complexity of Tasks assigned	Training status of forces	Intel / Counter-Intel	Special / unusual problems
• Amphibious Assault	• Force Readiness • Other Requirements	• Can Rehearsal Hurt or Help Execution?	• Difficult Terrain • Integration of Coalition Partners

Time Available	Suitability of Rehearsal Area
• Crisis Action • Deliberate	• Is a beach necessary? • Is a beach available?

TYPES OF REHEARSALS

SEPARATE FORCE REHEARSAL



STAFF REHEARSAL

INTEGRATED REHEARSAL

MOVEMENT

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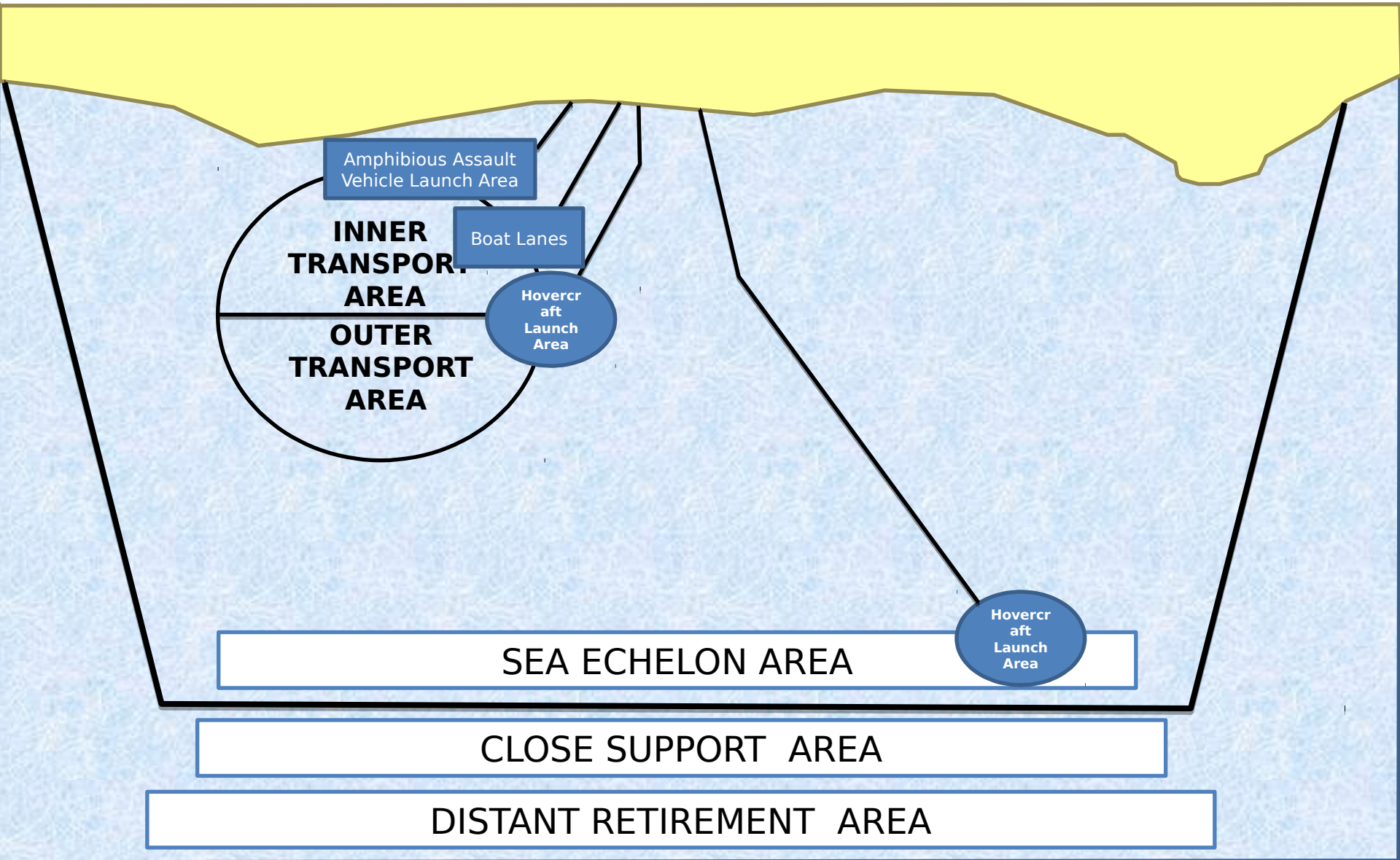
United States Navy

ORGANIZATION FOR MOVEMENT

- Amphibious shipping will be divided in support of the landing plan into multiple kinds of groups
  - Transport Groups
  - Movement Groups
  - Pre-D-day Groups
  - Post-D-day Groups
  - Follow-up Groups

RGANIZATION OF THE SEA AREA



ACTION: SUPPORTING, ADVANCE FORCE, AND PREASSAULT OPERATIONS

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United States Marine Corps

JPPORTING, ADVANCE FORCE, AND PREASSAULT OPERATIONS

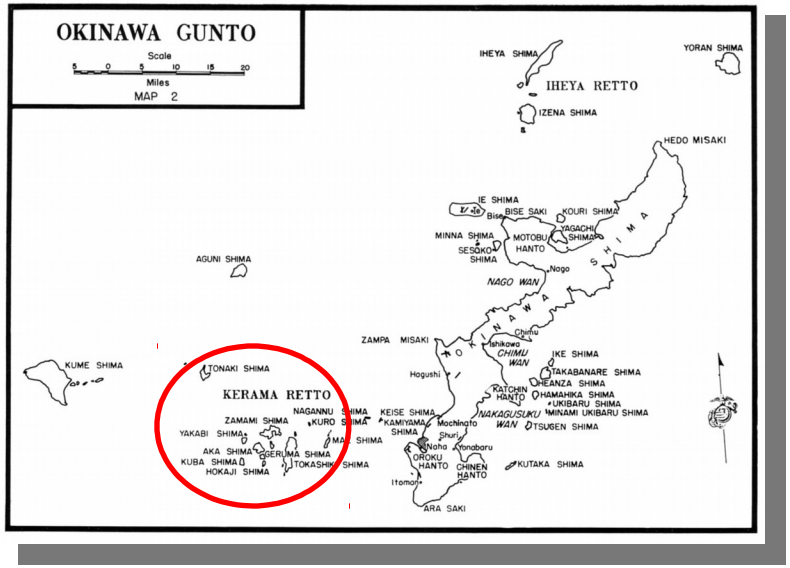
- **Plans and Actions are Driven by the Desire to Shape the Battlespace**
- **Shaping Actions Traditionally Occur Sequentially**
- **The Order of Occurrence:**
  - **Supporting**
  - **Advanced Force**
  - **Preassault**
- **The force used and time of executi**
- **typically define the operation**
- **The Basic Purposes:**
  - **Isolate the landing area**
  - **Gain Information on the enemy and Environment**
  - **Prepare the landing area for the insertion of the LF**

Iwo Jima: Bombing began 74 days before landin

Iwo Jima: Battleships fire for days before landi

JPPORTING, ADVANCE FORCE, AND PREASSAULT OPERATIONS

- **Isolation of the Landing Area**
  - **Prevent the enemy from maneuvering within, reinforcing, or supplying forces that oppose the assault**
- **Gain Information**
  - **HUMINT**
  - **Aviation ISR Platforms**
  - **SIGINT**
- **Prepare the Landing Area**
  - **Aviation / NSFS Targeting**
  - **Seizure of Key Terrain**
  - **Destruction / Neutralization of Targets (Raids)**
  - **Reduction of Mines and Obstacles**
  - **Clear Seaward approaches**
  - **Set conditions for effective guidance of landing craft**



JPPORTING, ADVANCE FORCE, AND PREASSAULT OPERATIONS

Considerations for Planning Pr

Clandestine Preassault

- **Advantage**: Potential to achieve surprise / Intel

Overt Preassault

- **Advantage**: Isolation / Landing Area Prepared / Intel

Deception

- **Advantage**: Enemy reduced / disrupted
- **Disadvantage**: Reduced Combat Power

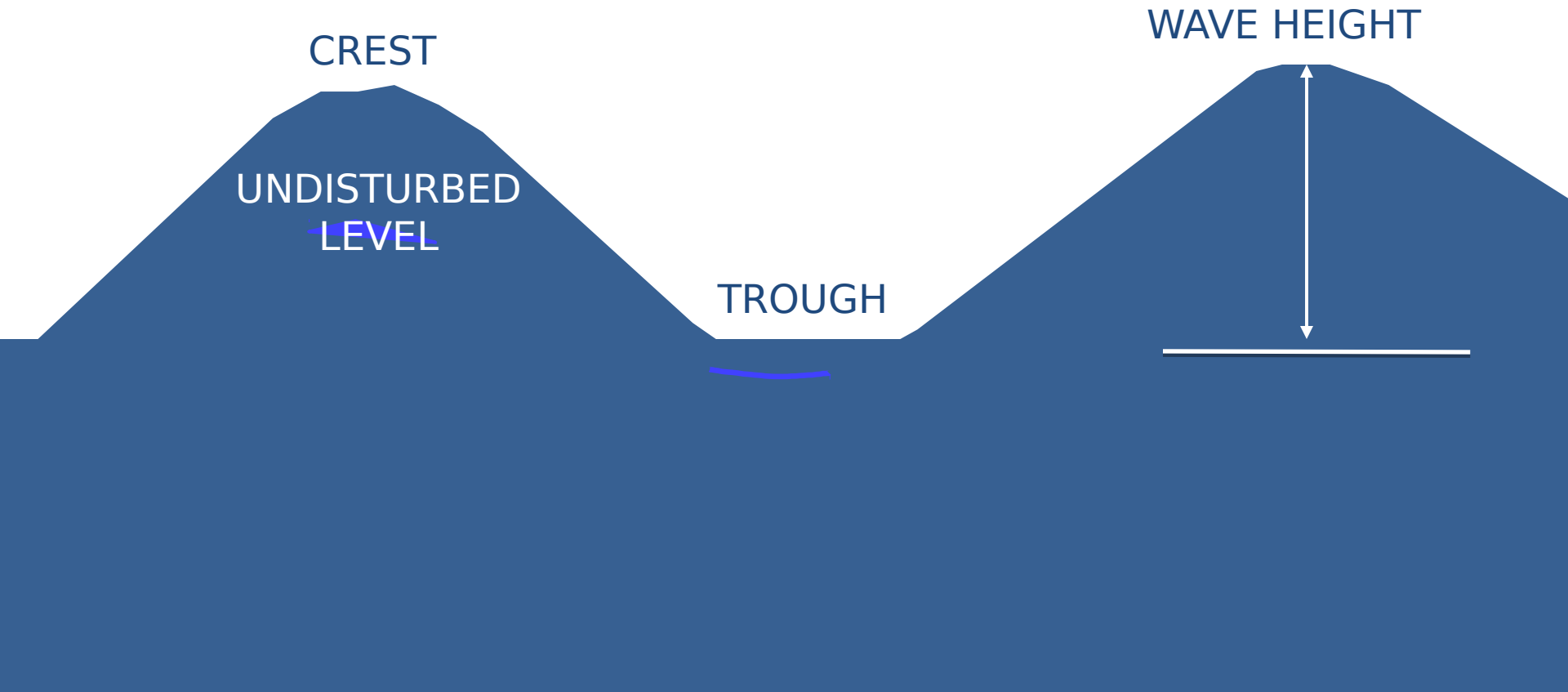
BEACH AND SURF PLANNING

Chief Warrant Officer
Stegman

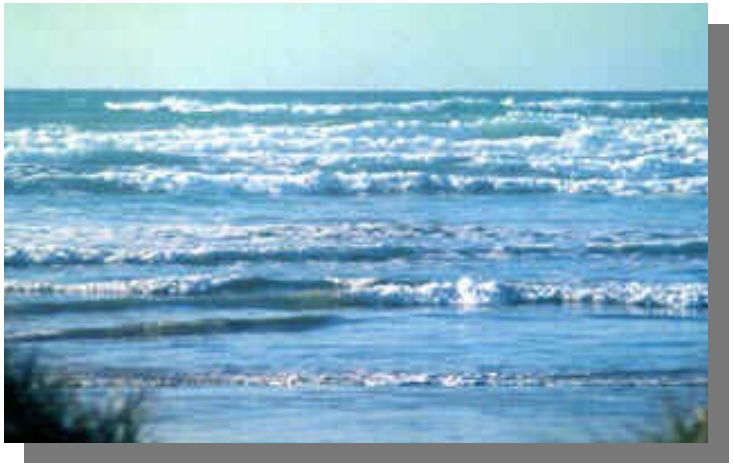
United States Marine Corps

WAVE TERMS

WAVELENGTH



BREAKER TERMS



★Spilling

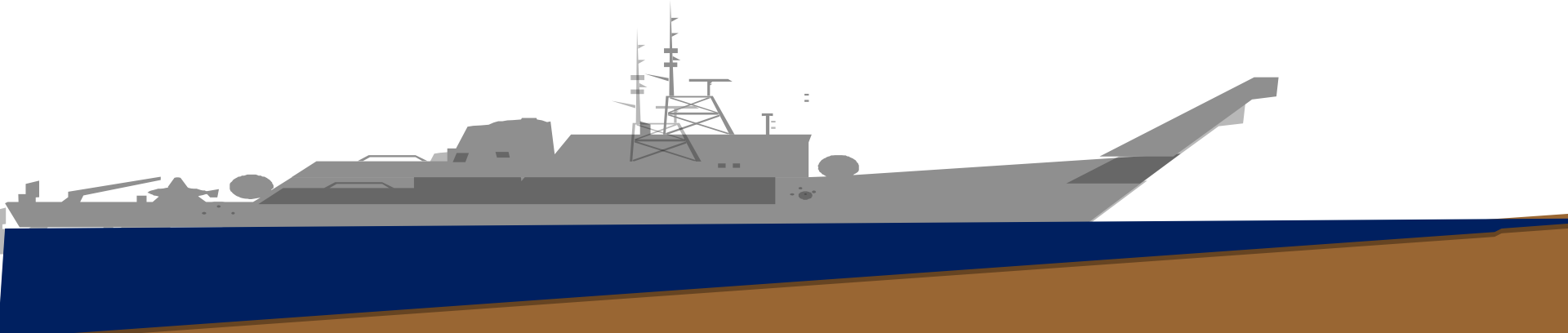
Plunging

Surging

BEACH TERMS

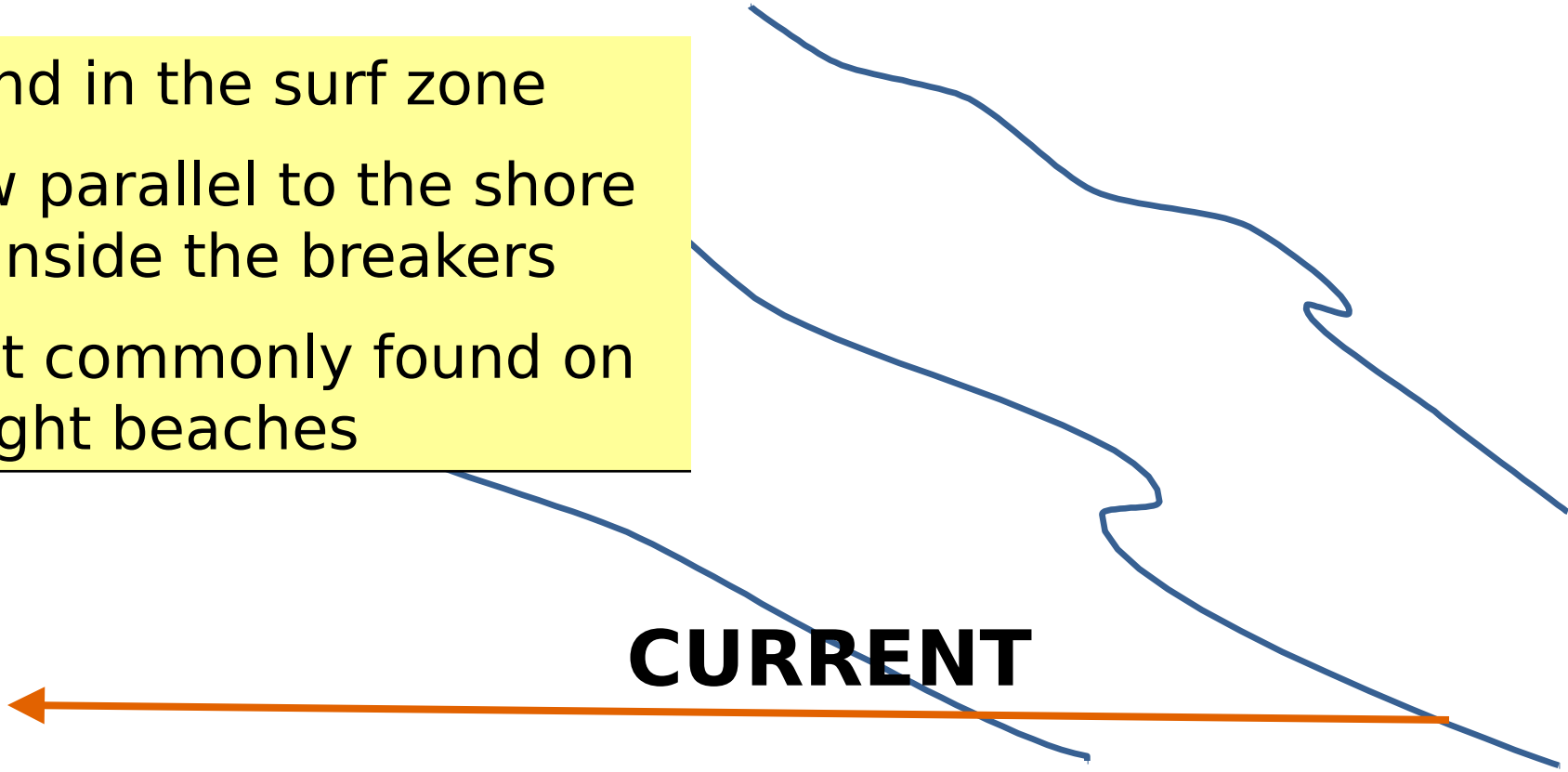
Steep	1:15 or steeper
Moderate	1:15 to 1:30
Gentle	1:30 to 1:60
Mild	1:60 to 1:120
Flat	1:120 or flatter

Preferred

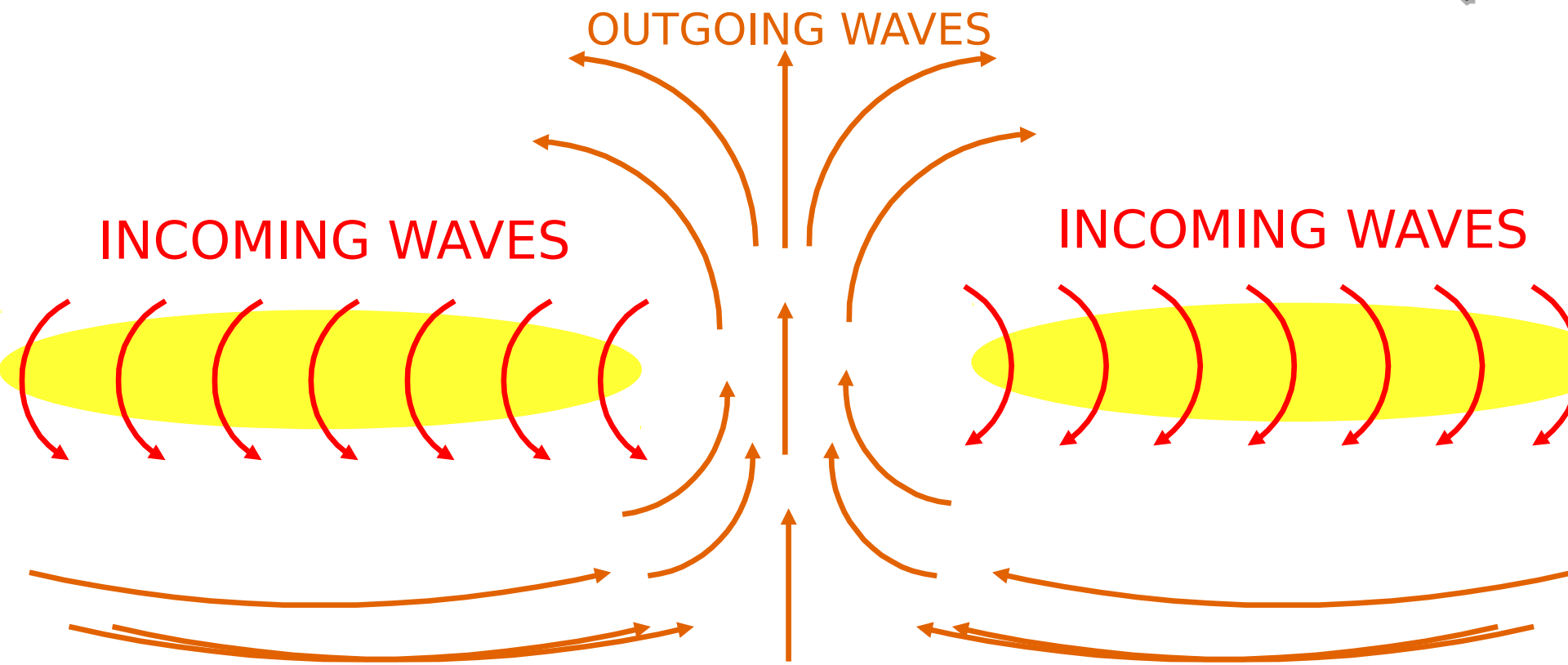


ONG SHORE CURRENT

- Found in the surf zone
- Flow parallel to the shore line inside the breakers
- Most commonly found on straight beaches



RIP CURRENT



- Caused by the waves piling water against the coast
- Flows along shore until it is reflected seaward by bottom irregularities or u
  meets another current and flows out through the breakers

BEACH SELECTION INFORMATION REQUIRMENTS

- Surf/swell
- Tides
- Currents
- Water depth
- Beach slope
- Beach features
- Sea state

- Surf zone width
- Sig. breaker height
- Depth/angle breaking
- Wavelength
- Longshore current
- reaker Period

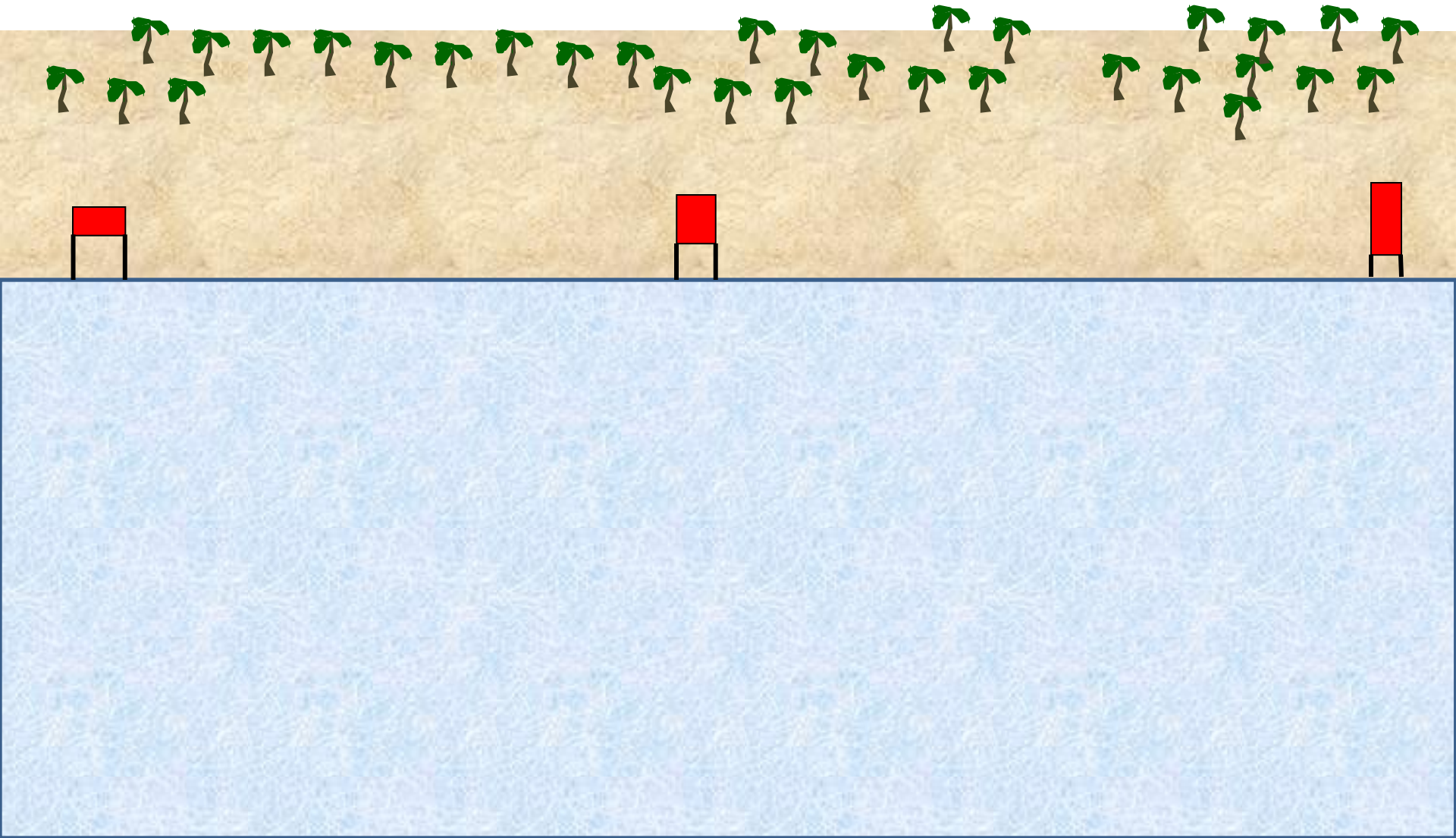
Enemy Situation

SURFACE SHIP-TO-SHORE MOVEMENT

Chief Warrant Officer
Stegman

United States Navy

SURFACE SHIP TO SHORE MOVEMENT



LOGISTICS ON SHORE

Chief Warrant Officer
Stegman

United States Navy

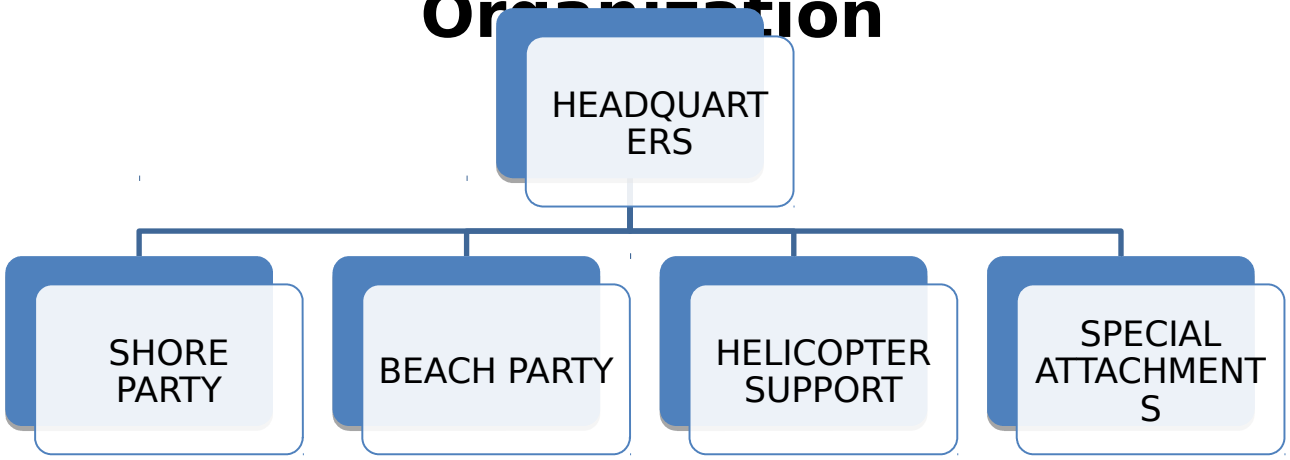
LOGISTICAL PLANNING FACTORS

- Operation characteristics
- Target date
- Objective Area characteristics
- Enemy capabilities
- Size, type of LF
- Means of distribution
- Transportation infrastructure
- Resupply
- Phased increase in logistics capabilities
- Enemy Prisoners of War
- Availability of logistic means
- Compatibility, capability of support systems
- Communication
- Force Protection
- Airfields
- Chemical Threat
- Shipping availability
- Health risks

E LANDING FORCE SUPPORT PARTY

Temporary Landing Force organization, composed of Navy and Landing Force elements, that facilitates the ship-to-shore movement and provides initial combat support and combat service support to the Landing Force.

Landing Force Support Party Organization



THE LANDING PLAN

Maj Steele

United States Marine Corps

LANDING PLAN DOCUMENTS

The Serial Assignment Table:

Definition: The LF serial assignment table lists in numerical order the serial numbers of all units that are landed prior to general unloading. The table is a ready reference for the composition of each unit assigned a serial number

What is a Serial?

Definition: A group of LF units and their equipment which **originate from the same ship** and that, for tactical or logistics reasons, **will land on a specified beach or a specified HLZ** at the **same time**.

Example: 1520 = 1st Squad, 1st Platoon, India Company

Battalion creates an “Equipment Density List” that is tied to the Serial Assignm Table

LANDING PLAN DOCUMENTS

The Landing Diagram:

Definition: A graphic depiction of the tactical deployment of **boat teams** in **scheduled waves**

Scheduled Waves	Wave Composition	Serial
Wave # Time	**Unit Description** **Craft Type** **Boat Team #**	**Ref** **LCAVAT / SAT**
Wave 1 H-Hour	Co C (-)(Rein); 1st Asslt Amphib Plat (-)(Rein) X X X (X)* X X X X 1-1 1-2 1-3 1-4 1-5 1-6 1-7 1-8	x 1345 1350 1355 1440

LANDING PLAN DOCUMENTS

Landing Craft and Assault Vehicle Landing Table:

Definition: A table showing the assignment of personnel and materiel to each landing craft and amphibious vehicle and the assignment of the landing craft and amphibious vehicles to waves for the ship-to-shore movement.

Craft No	Personnel and Material	Boat Spaces	Formation
Two-digit Type	**Description of unit, person or or item filling a boat space**	**Number of spaces filled by person, unit or item**	**From landing diagram**
1-1 AAVP7	1st Sqd, 1st Plt, Co B Corpsman MG Tm, 1st MG Sqd SMAW Tm, 1st Assault Sqd	11 1 3 2 17	

LANDING PLAN DOCUMENTS

The Landing Sequence Table:

Definition: The LST is a complete listing of the **estimated landing sequence of nonscheduled units …** It is the principle document used by control agencies in directing the ship-to-shore movement of these units. (MCWP 3-31.5)

LANDING SEQUENCE TABLE

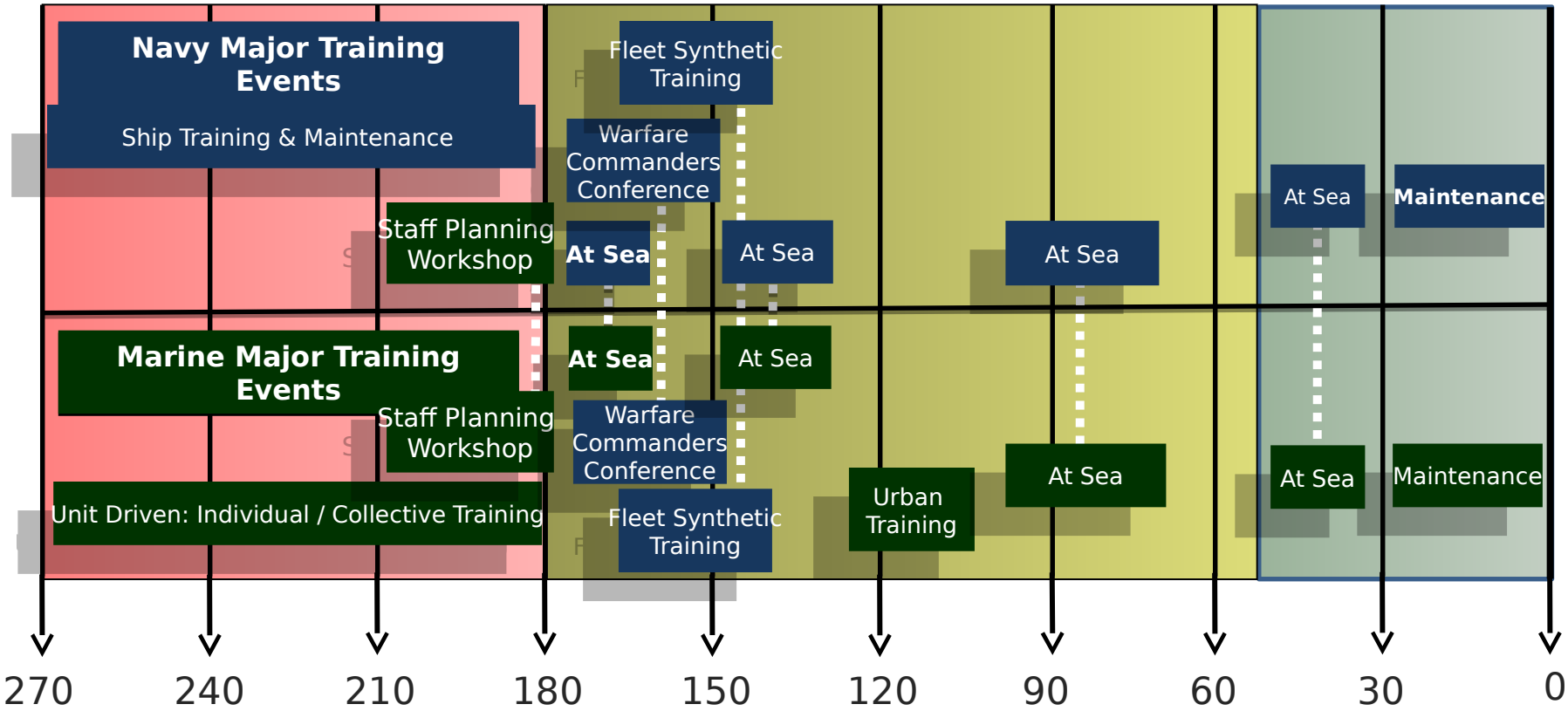
Unit	Element	Serial #	Carrier No.	Carrier Type	Ship	Beach	Remarks
WPNS CO	AT SECT, AA	3205	1	LCAC	LPD-17	BLK BCH	
WPNS LPD-17 CO	PLT HMG PLT BLK		3200	1 LCAC			

NAVY AND MARINE DEPLOYMENT TRAINING

Maj Steele

United States Marine Corps

NAVY AND MARINE DEPLOYMENT TRAINING



AMPHIBIOUS WARFARE TRAINING

Major Steele

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